Appl. No. 09/526,106 Amdt. dated October 31, 2003 Reply to Office Action of June 17, 2003

This listing of claims will replace all prior versions and listings of claims in the application. Please cancel claims 1-62. Please amend claims 63-66.

## **Listing of Claims:**

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1-62. (Canceled)

1	63. (Currently Amended) A β-lactamase enzyme fragment for use in a fragmen	ıt
2	complementation system comprising an N-terminal β-lactamase fragment,	
3	wherein said N-terminal $\beta$ -lactamase fragment consists of amino acids $\frac{1}{26}$ to	188
4	up to amino acid 207 of a β-lactamase sequence with the following numbering convention:	
5	His Pro Glu Thr Leu Val Lys Val Lys Asp Ala Glu Asp Gln Leu Gly	
6	<u>26 30 35 40</u>	
7	Ala Arg Val Gly Tyr Ile Glu Leu Asp Leu Asn Ser Gly Lys Ile Leu	
8	<u>45</u> <u>50</u> <u>55</u>	
9	Glu Ser Phe Arg Pro Glu Glu Arg Phe Pro Met Met Ser Thr Phe Lys	
10	606570	
11	Val Leu Cys Gly Ala Val Leu Ser Arg Ile Asp Ala Gly Gln Glu	
12		
13	Gln Leu Gly Arg Arg Ile His Tyr Ser Gln Asn Asp Leu Val Glu Tyr	
14	90 95 100 105	
15	Ser Pro Val Thr Glu Lys His Leu Thr Asp Gly Met Thr Val Arg Glu	
16	<u> </u>	
17	Leu Cys Ser Ala Ala Ile Thr Met Ser Asp Asn Thr Ala Ala Asn Leu	
18	<u>125</u> <u>130</u> <u>135</u>	
19	Leu Leu Thr Thr Ile Gly Gly Pro Lys Glu Leu Thr Ala Phe Leu His	
20	<u> </u>	
21	Asn Met Gly Asp His Val Thr Arg Leu Asp Arg Trp Glu Pro Glu Leu	
22	<u>155</u> <u>160</u> <u>165</u>	

24		Asn Glu A	la Ile Pro Asn Asp (	Glu Arg Asp Thr Tl	nr Met Pro Val Ala	
25		170	175	180	185	
26		Met Ala T	hr Thr Leu Arg Lys	Leu Leu Thr Gly G	lu Leu Leu Thr Leu	
27			190	195	200	
28		Ala Ser Ar	g Gln Gln Leu Ile A	sp Trp Met Glu Al	a Asp Lys Val Ala	
29			205	210	215	
30		Gly Pro Le	eu Leu Arg Ser Ala	<u>Leu Pro Ala Gly Tr</u>	p Phe Ile Ala Asp	
31		22	20 2	225	230	
32		Lys Ser Gl	y Ala Gly Glu Arg	Gly Ser Arg Gly Ile	Ile Ala Ala Leu	
33		235	240	245	<u>5</u>	
34		Gly Pro As	sp Gly Lys Pro Ser A	Arg Ile Val Val Ile	<u> Yyr Thr Thr Gly</u>	
35		250	255	260	265	
36		Ser Gln Al	a Thr Met Asp Glu	Arg Asn Arg Gln Il	e Ala Glu Ile Gly	
37			270	275	280	
38		Ala Ser Le	u Ile Lys His Trp			
39			285			
40		<del>of</del> (SEQ ID	NO: 2);			
41		wherein sa	id N-terminal β-lact	amase fragment is a	able to functionally rec	onstitute
42	with a C-termi	inal β-lactar	nase enzyme fragme	ent consisting of am	ino acids <del>263</del> <u>288</u> to 2	08 up to
43	amino acid 18	9 of <del>-SEQ II</del>	NO: 2 said β-lacta	mase sequence; and	[	
44		wherein sai	id N-terminal β-lact	amase fragment is a	ltered from <del>SEQ ID N</del>	<del>O: 2</del> said
45	β-lactamase se	equence by a	at least one amino ac	cid substitution sele	cted from the group co	nsisting
46	of:					
47		(a) a ly	sine to glutamic aci	d substitution at po	sition 55,	
48	(b) a proline to serine substitution at position 62, and					
49		(c) a methionine to threonine substitution at position 182.				

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1	64. (Currently Amended) The β-lactamase enzyme fragment of claim 63, wherein
2	said N-terminal $\beta$ -lactamase fragment consists of amino acids $\frac{1}{26}$ to 195 up to amino acid 202
3	of <del>SEQ-ID-NO: 2</del> said β-lactamase sequence.
1	65. (Currently Amended) The β-lactamase enzyme fragment of claim 63, wherein
2	said N-terminal β-lactamase fragment consists of amino acids ± 26 to 197 of SEQ ID NO: 2 said
3	<u>β-lactamase sequence</u> and said C-terminal β-lactamase fragment consists of amino acids $\frac{263}{200}$
4	to 198 of SEQ ID NO: 2 said β-lactamase sequence.
1	66. (Currently Amended) The β-lactamase enzyme fragment of claim 63, wherein
2	said N-terminal β-lactamase fragment consists of amino acids ± 26 to 197 of SEQ ID-NO: 2 said
3	<u><math>\beta</math>-lactamase sequence</u> , said C-terminal $\beta$ -lactamase fragment consists of amino acids $\frac{263}{288}$ to
4	198 of SEQ ID NO: 2 said $\beta$ -lactamase sequence, and said N-terminal $\beta$ -lactamase fragment
5	comprises the amino acid substitution (c).